SPARTE 500 series antenna, commonly mounted with a 5.5m reflector, is a field and time proven product delivered to customers for mission-critical applications where the telemetry reception is at stake.

Wherever telemetry tracking and reception matters, Safran Data Systems SPARTE 500 series antennas make the difference: high performance, in-the-field upgrade-ability to C-band support, skid or trailer-mounted mobility, and even 3-axis shipborne versions.

Widely used across world test ranges, the SPARTE 500 series antennas meet the most demanding flight test profiles. Its lean design and ease of operations make it a perfect match for any ground test range, as a complement to smaller range trackers.
SYSTEM SPECIFICATIONS

Pedestal
Azimuth Travel Range ................................................................. Unlimited
Elevation Travel Range ................................................................. -5° / + 91°
Angular Velocity ................................................................. 20°/s
Angular Acceleration ................................................................. 20°/s²
Motors ................................................................. Single Drive DC Brushless

Servo-Control
Pointing Accuracy ................................................................. ≤ 0.1°
Tracking Accuracy ................................................................. ≤ 0.1°
Acceleration Lag ................................................................. 0.07°/°/s²

Antenna Control Unit
Manual, Slew, Scan, Slave (2 x Inputs), RF Tracking, Program-Track, GPS Slaving
Advanced Features: Autotrack (Automatic ACU Modes Management), Auto Acquisition (with Adjustable Signal Thresholds), Multpath Clipping, Phase & Slope Auto Calibration, ...
Tracking Signal Inputs ............................................................... 4x Pairs of AM+AGC
Auto-Diversity ................................................................. LHCP/RHCP, Best Telemetry Channel
Diagnostic Tool......Continuous BIT, Servo-Control, Tracking, Y-Factor, Logbook, Parameters Recording

General Characteristics
Power ................................................................. 230 or 400 Vac 50-60Hz. 6.8kVA
Antenna Weight ................................................................. 2600 kg (5700 lbs)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range
Outdoor Equipment ................................................................. -4°F to 122°F (-20°C to +50°C)
Indoor Equipment ................................................................. +5°F to 95°F (+10°C to +35°C)

Operational Wind
Mean ................................................................. ≤ 85 km/h
Gust ................................................................. ≤ 100 km/h
Survival Wind ................................................................. ≤ 200 km/h

Humidity
Outdoor ................................................................. 100 %
Indoor ................................................................. 85 % Non-Condensing

OPTIONAL ITEMS

- INET
- Operator control desk
- Axial video camera for visual target aiming
- Reflex and feed de-icing system
- Cable wrap for special application (+/- 370°)
- Acquisition aid antenna
- Low gain switching for short range
- Single / Dual / Tri-band feed
- 3-axis pedestal version for shipborne operations
- Radome environment protection
- Trailer/Skid adaptation kit
- GPS time / position synchronization / North autocalibration
- Compatible with Zodiac Telemetry Mission Controller (TMC)
- Custom form factors on demand
- Extend temperature -30°C

4.6 M / 15 FT

<table>
<thead>
<tr>
<th>Tracking</th>
<th>8 Dipoles Monopulse</th>
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<tbody>
<tr>
<td>Receive Frequency Range</td>
<td>1429 - 1545 MHz / 2200 - 2400 MHz / 4400 - 5200 MHz</td>
</tr>
<tr>
<td>Receive Polarization</td>
<td>RHCP and LHCP</td>
</tr>
<tr>
<td>Axial Ratio</td>
<td>≤ 1.5 dB on Axis</td>
</tr>
<tr>
<td>-3dB Beamwidth @ 2.3GHz</td>
<td>2°</td>
</tr>
<tr>
<td>G/T @2300 MHz, No Filter, 10° Elevation, 20°C Clear Sky</td>
<td>14.5 dB/K</td>
</tr>
<tr>
<td>Maximum Wind for Nominal / Degraded Performance</td>
<td>100 / 120 km/h</td>
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5.5 M / 18 FT

<table>
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<tr>
<th>Tracking</th>
<th>8 Dipoles Monopulse</th>
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<tbody>
<tr>
<td>Receive Frequency Range</td>
<td>1429 - 1545 MHz / 2200 - 2400 MHz / 4400 - 5200 MHz</td>
</tr>
<tr>
<td>Receive Polarization</td>
<td>RHCP and LHCP</td>
</tr>
<tr>
<td>Axial Ratio</td>
<td>≤ 1.5 dB on Axis</td>
</tr>
<tr>
<td>-3dB Beamwidth @ 2.3GHz</td>
<td>1.6°</td>
</tr>
<tr>
<td>G/T @2300 MHz, No Filter, 10° Elevation, 20°C Clear Sky</td>
<td>16 dB/K</td>
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<tr>
<td>Maximum Wind for Nominal / Degraded Performance</td>
<td>85 / 100 km/h</td>
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